REMARKS

The Office Action dated September 5, 2007 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 19-30 have been amended to correct minor informalities and are submitted for reconsideration.

Claims 19-30 were rejected under 35 U.S.C. §101 because the claims fail to set forth any steps involved in the process, which results in an improper definition of a process. Applicant submits that newly amended independent claims 19-20 recite a process with at least one clearly recited process operation. Accordingly, the withdrawal of the rejection to claims 19-30 is requested.

Claims 19-30 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action recites similar reasons for rejecting claims 19-30 as compared with those described above with regard to the rejection under 35 U.S.C. §101. Therefore, the amendments to independent claims 19-20 also overcomes the rejection under U.S.C. §112, second paragraph, for indefiniteness. Withdrawal of the rejection to claims 19-30 is requested.

Claims 19-30 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,393,007 to Haartsen in view of U.S. Patent No. 5,455,962 to Kotzin et al. and further in view of "Channel Assignment Schemes for Cellular Mobile

Telecommunications Systems: A Comprehensive Survey" to Katzela et al. This rejection is respectfully traversed.

Claim 19, upon which claims 21-25 are dependent, recites a method of transmitting data in units of bursts, each burst occupying a time slot of one of consecutive frames, each respective frame comprising a predetermined number n of time slots, within each time slot of each frame, data can be transmitted between a first transceiver device and a respective one of a plurality of second transceiver devices either in a first transmission direction from the first transceiver device to the respective second transceiver device or in a second transmission direction from the respective second transceiver device to the first transceiver device, the second transmission direction is opposite to a transmission direction of another time slot of the same frame in which data is transmitted between the first transceiver device and another one of the second transceiver devices, wherein transmission in the first direction occurs in predetermined and fixed time slots in each of consecutive frames, and transmission in the second direction occurs in different time slots in each of consecutive frames, wherein in the second direction, during a first frame of consecutive frames respective second transceiver devices perform transmission to the first transceiver device during an assigned transmission k^{th} time slot, and during a subsequent second frame of the consecutive frames, respective second transceiver devices perform transmission to the first transceiver device during a different assigned transmission l^{th} time slot , with $0 \leq k, l \leq n-1$ and $k \neq l$.

Claim 20 upon which claims 26-29 are dependent, recites a method of transmitting data in units of bursts, each burst occupying a time slot of one of consecutive frames, each respective frame comprising a predetermined number n of time slots, wherein within each time slot of each frame, data can be transmitted between a first transceiver device and a respective one of a plurality of second transceiver devices either in a first transmission direction from said first transceiver device to said respective second transceiver device or in a second transmission direction from said respective second transceiver device to said first transceiver device, said second transmission direction is opposite to a transmission direction of another time slot of the same frame in which data is transmitted between said first transceiver device and another one of said second transceiver devices, wherein transmission in said first direction occurs in different time slots in each of consecutive frames, and transmission in said second direction occurs in predetermined and fixed time slots in each of consecutive frames, wherein in said first direction during a first frame of consecutive frames respective first transceiver devices perform transmission to said second transceiver device during an assigned transmission k^{th} time slot, and during a subsequent second frame of said consecutive frames, respective first transceiver devices perform transmission to said second transceiver device during a different assigned transmission l^{th} time slot, with $0 \leq k, l \leq n-1$ and $k \neq l$.

As will be discussed below the combination of Haartsen, Kotzin and Katzela, individually or in combination, fails to disclose or suggest all of the elements of the claims, and therefore fails to provide the features discussed above.

After reviewing the contents of the Office Action mailed on September 5, 2007, Applicants submit that all of the claim limitations recited in independent claim 19, and similarly independent claim 20 have not been addressed. In particular, claim 19 recites,

> "transmission in said first direction **occurs in predetermined and fixed time slots in each of consecutive frames, and**
> transmission in said second direction occurs in **different time slots in each of consecutive frames**",

and, claim 20 recites,

> "transmission in said first direction occurs in different time slots in **each of consecutive frames, and**
> transmission in said second direction **occurs in predetermined and fixed time slots in each of consecutive frames**."

None of these above noted features of independent claims 19-20 are addressed by the Office Action. Furthermore, none of the three references cited, including, Haartsen, Kotzin and Katzela teach or suggest the above noted features of independent claims 19-20.

Haartsen is directed to an interference diversity communication system that performs time slot hopping based on the type of information transmitted in that particular time slot. FIG. 3 of Haartsen (as cited in the Office Action) illustrates two subsequent frames (k) and (k+1) each having a transmission portion and a reception portion. A channel A is discussed as jumping 10 time slots from time slot 1 of the first transmission portion of the first frame (k) to slot 11 of a transmission portion of a subsequent frame

(k+1). Likewise, the reception portions of frames (k) and (k+1) include time slot shifting for channels common to both frames.

In summary, Haartsen discloses frames with transmitting and receiving portions, both of which perform time slot shifting on channels (A, B, C etc.) common to both frames. The transmission portion performs time slot shifting and the receiving portion performs time slot shifting. (Emphasis added)

Contrary to the subject matter disclosed in FIG. 3 of Haartsen, claim 19 recites

> "transmission in said first direction **occurs in predetermined and fixed time slots in each of consecutive frames, and**
> transmission in said second direction occurs in **different time slots in each of consecutive frames**"

Haartsen does not teach or suggest the above noted features of claim 19. FIG. 3 of Haartsen does not disclose or suggest consecutive frames with transmission in a first direction occurring in predetermined time slots and transmission occurring in a second direction in different time slots. Therefore, Haartsen does not disclose the above noted features of claims 19-20.

Referring to Kotzin, Applicants submit that the half hopping format of Kotzin does not teach or suggest the features recited in claim 19. For instance, performing frequency hopping on an uplink transmission of a mobile subscriber while not performing frequency hopping on a downlink transmission does not support consecutive frames each having two transmission directions with one having predetermined time slots for the transmission occurring in one direction and different time slots for the transmission

occurring in the other direction. Frequency hopping is based on alternating frequencies. Conversely, claim 19 is directed to predetermined and fixed time slots of consecutive frames. Therefore, Kotzin discloses nothing to support the above noted features of claims 19-20.

As for the Katzela reference, the Office Action has not provided any support for the above noted portions of claims 19-20 when referring to reference Katzela. The Office Action refers to a section of Katzela entitled "Review of Channel Allocation Schemes" as allegedly disclosing features recited in claim 19. Applicants submit that no such section exists anywhere within the range of pages (Pp. 10-31) of the Katzela reference.

The Office Action further refers to FCA, DCA and HCA as allegedly providing support for the subject matter recited in claim 19. Applicants disagree, and submit that none of the fixed channel allocation (FCA), dynamic channel allocation (DCA) and hybrid channel allocation (HCA) schemes provide any teaching or suggestion for the above noted features recited in claims 19-20.

FCA permanently allocates channels to a particular cell. The cell is the exclusive user of the allocated channels. For DCA, channels are dynamically assigned based on user traffic and varying conditions present in the communications environment. In HCA, some channels are fixed and some are dynamic giving rise to a hybrid channel allocation scheme. None of these channel allocations schemes address fixed and predetermined time slots being in a single frame, and where those time slots are fixed for one transmission direction and changing for another transmission direction over consecutive

frames. Therefore, Katzela discloses nothing to support the above noted features of claims 19-20.

For at least the reasons discussed above, Applicants respectfully submit that that cited references fail to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of the claims 19-30 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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Enclosure: Petition for Extension of Time
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